

Systems Engineering

Systems Engineering You Can Trust

TCI systems engineers have the experience to successfully guide your project from inception through production and fielding. Our proven methodologies cover all phases of the systems engineering process to ensure program success.



Reliable and Sustainable Systems

The TCI systems engineering teams ensure that supportability, producibility, and reliability are designed into the system from the start. We take special care to design systems that meet your users' needs. Our integrated approach brings these elements together for a cost-effective solution throughout the system life-cycle.

Systems engineering that guides your product from inception to fielding.

Capabilities

Designing for Success at All Phases

We provide System Requirements Definition and Flow-Down using IBM Rational System Architect and DOORS for effective requirements management.

Here's how we can help:

- Documentation Development
- Initial Capabilities Documents (ICDs)
- Analysis of Alternatives (AOAs)
- Technology Development Strategies (TDSs)
- Department of Defense Architecture Framework (DoDAF)
- Capabilities Development Documents (CDDs)
- System Performance Specifications (SPSs)
- System Engineering Plans (SEPs)
- Human Systems Integration Plans (HSIPs)
- Programmatic Environment, Safety & Health Evaluations (PESHEs)
- Capabilities Production Documents (CPDs)
- Additionally, we also provide systems engineering expertise for all acquisition documentation.



Optimize Cost

We work hard to optimize your system's life-cycle cost. We provide sound requirements development and management to prevent the addition of costly requirements late in the process.

Here's how we can help:

- Design to Cost
- Design for Manufacturing
- Design for Reliability and Reliability Growth
- Cost as an Independent Variable (CAIV) analysis
- Risk & Opportunity Management

System Sustainment

We want to ensure that your system performs as intended and continues to do so throughout its entire life-cycle.

Here's how we can help:

- Installations
- Reliability Analysis
- Configuration Management
- Change Management
- System Upgrades
- Engineering Change Proposals
- Field Change Bulletins
- Field Engineering
- Obsolescence Planning
- Life-Cycle Extensions

Technical Reviews and Testing

We provide the support necessary for successful system engineering technical reviews and testing.

Here's how we can help:

- Reviews
- Integrated Baseline Reviews
- System & Functional Requirements Reviews
- Preliminary & Critical Design Reviews
- Test Readiness Reviews
- System Verification & Production Readiness Reviews
- Functional & Physical Configuration Audits
- Testing



- Development of test plans, test procedures, and test schedules
- Provide government test witnesses to monitor Design Verification Tests (DVTs) and environmental testing
- Evaluation of test results to ensure that test objectives were successfully met, and system performance is optimized.
- Support Development Testing & Evaluation (DT&E), Operational Testing & Evaluation (OT&E), and Operational Assessments (OA)

We have many sub-specialty engineers that provide the expert knowledge to take your system from inception through development, production, and fielding.